

U. S. DEPARTMENT OF COMMERCE
Environmental Science Services Administration

in cooperation with
Cotton Economic Research and
Bureau of Business Research of
The University of Texas at Austin

CLIMATOGRAPHY OF THE UNITED STATES NO. 20-41

CLIMATOLOGICAL SUMMARY

Revised April 1970

STATION ALICE, TEXAS

LATITUDE 27° 44' N
 LONGITUDE 98° 04' W
 ELEV. (GROUND) 201 ft.

MEANS AND EXTREMES FOR PERIOD 1932-1969

Month	Temperature (°F)								** Mean degree days	Precipitation Totals (Inches)						Mean number of days							
	Means			Extremes						Mean	Greatest daily	Year	Snow, Sleet			Precip. .10 inch or more	Temperatures				Month		
	Daily maximum	Daily minimum	Monthly	Record highest	Year	Record lowest	Year	Mean					Maximum monthly	Year	Greatest Depth		Year	90° and above	Max.			Min.	
																			32° and below	32° and below		0° and below	0° and below
(a)	37	37	37	37		37		14	37	37		37	37		14		14	14	14	14			
Jan	68.0	45.2	56.6	93	1969	12	1962	344	1.37	4.65	1958	0.1	2.0	1940	0	3	*	*	5	0	Jan		
Feb	71.9	48.2	60.1	98	1940	15	1951	223	1.48	3.40	1958	0.1	4.5	1960	0	4	1	0	3	0	Feb		
Mar	78.0	53.6	65.8	103	1952	27	1932	111	1.10	2.90	1935	0	0	0	0	2	2	0	*	0	Mar		
Apr	85.0	62.1	73.6	107	1963+	33	1938	12	1.80	3.85	1966	0	0	0	0	3	9	0	0	0	Apr		
May	89.4	68.2	78.8	107	1955	43	1954	1	2.93	4.10	1936	0	0	0	0	4	15	0	0	0	May		
Jun	94.4	72.8	83.6	110	1942	59	1955	0	2.96	4.00	1962	0	0	0	0	4	26	0	0	0	Jun		
Jul	97.3	74.2	85.8	111	1939	61	1967	0	1.96	10.00	1942	0	0	0	0	3	30	0	0	0	Jul		
Aug	98.2	73.7	86.0	110	1956	61	1967+	0	2.28	4.75	1942	0	0	0	0	3	29	0	0	0	Aug		
Sep	92.5	70.1	81.3	108	1953	45	1942	*	4.90	13.21	1951	0	0	0	0	6	23	0	0	0	Sep		
Oct	86.4	61.5	74.0	102	1938	38	1957+	15	2.69	4.75	1946	0	0	0	0	4	12	0	0	0	Oct		
Nov	76.8	52.8	64.8	96	1969+	29	1948	93	1.41	2.73	1957	0	0	0	0	4	1	0	*	0	Nov		
Dec	69.7	46.6	58.2	92	1942+	22	1950+	268	1.55	3.30	1943	0	0	0	0	3	*	0	2	0	Dec		
Year	84.0	60.8	72.4	111	July 1939	12	Jan. 1962	1067	26.43	13.21	Sept. 1951	0.2	4.5	Feb. 1960	0	43	148	*	10	0	Year		

(a) Average length of record, years.

+ Also on earlier dates, months, or years.

T Trace, an amount too small to measure.

* Less than one half.

** Base 65°F

THE CLIMATE OF ALICE, TEXAS

Alice, named after the daughter of one of the founders of the famed King Ranch, is the county seat, supply, and marketing center for Jim Wells County. Located 43 highway miles west of Corpus Christi and 100 miles east of Laredo, Alice is the dividing point between the noted brush country and the coastal plains, and also the dividing point between the border region and the rest of Texas. Alice is the hub of petroleum and agribusinesses in this area. A new boat plant, hospital, nursing home, and new shopping centers are located here also. The world's largest Jersey herd is located at Sandia, 23 miles northeast of Alice. Jim Wells County lies on the Rio Grande Plain, and is level to rolling with both sandy and dark soils. Elevations range from 100 to 400 feet above sea level. Besides cattle, principal agricultural products are sorghums, cotton, flax and vegetables. Twenty-five hundred acres are irrigated.

The climate of Alice is subtropical with dry winters and hot humid summers. Rainfall averages 26.43 inches annually with peak monthly totals occurring in May and June, and again in September and October. In most years March is the driest month. The climate is essentially continental, characterized by a considerable range in annual extremes of temperature; however, air masses of continental origin play a minor role in determining the weather in the area. The prevailing winds are southeasterly throughout the year, so that warm Tropical Maritime air masses from the Gulf of Mexico are responsible for mild winter temperatures and hot humid weather in summer. Rainfall, most often the result of thunderstorm activity, is extremely variable from month to month and from year to year. The year 1917 was the driest of record at Alice. Only 7.85 inches fell during the entire year. Two years later, in 1919, Alice received a total of 51.11 inches, making this the wettest year of record. Annually, the area receives about 63 percent of the total possible sunshine, and mean annual relative humidity is 84 percent at 6:00 a.m., 56 percent at noon, and 60 percent at 6:00 p.m., Central Standard Time. Seasonal

changes in relative humidity are small. Thunderstorms occur on about 30 days each year, and lake, or free water, evaporation is estimated at 57 inches annually.

Winters are pleasantly mild at Alice. Polar Canadian air masses push down across South Texas about once each week, but these undergo considerable modification by the time they reach the Alice area. In January, the coldest month, the daily temperature maxima average 68.0°F, and minima of 32°F or below occur only about five nights during the month. The lowest temperature ever recorded at Alice is 12°F, and occurred on January 12, 1962. Cloudiness is most prevalent in winter, limiting sunshine to about 50 percent of the total possible. Snow is practically non-existent at Alice. Since 1932, measurable snow has fallen only three times: in January 1940, January 1951, and February 1960.

The summers at Alice are most often hot and humid with little change in the day-to-day weather, except for an occasional rain shower. The hottest days are associated with the presence of Tropical Continental air masses over South Texas, and are characterized by a near-cloudless, hazy sky, light wind movement, and below average humidity. The highest temperature of record at Alice is 111°F, and occurred on July 9, 1939. Refrigerated-type air conditioning is recommended for maximum comfort indoors, and while traveling. Sunshine received in summer is about 75 percent of the total possible.

Spring and fall are most delightful seasons at Alice. Temperatures are moderate, and the weather has greater variety than in summer. Precipitation is usually the shower-type.

The warm season (freeze free period) at Alice is quite long, averaging 289 days. The mean dates of the last occurrence of 32°F or below in the spring, and the first occurrence of 32°F or below in the fall, are February 18 and December 4, respectively.

ALICE, TEXAS

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1932	61.0	67.2	61.6	72.4	78.0	85.2	87.2	86.8	80.6	72.1	60.8	53.8	72.2
1933	63.0	58.6	69.8	75.0	83.0	82.6	85.3	83.0	82.0	75.8	57.4	67.4	74.4
1934	60.0	60.8	61.4	73.8	78.8	85.0	85.0	80.4	80.4	76.8	68.8	60.5	73.2
1935	62.2	58.8	71.9	75.6	81.6	85.0	87.4	80.0	80.0	75.4	55.6	56.1	73.3
1936	54.6	54.9	69.8	69.8	76.4	83.4	85.8	85.2	83.8	69.4	63.6	61.2	70.9
1937	59.0	61.6	62.0	72.4	79.4	86.4	85.8	83.4	80.8	77.2	64.4	58.6	73.5
1938	59.2	64.5	69.6	72.4	76.4	87.2	86.2	81.1	81.1	75.5	64.4	58.5	-
1939	57.1	61.6	68.6	76.0	81.2	89.0	87.0	86.4	81.4	74.9	61.4	58.5	-
1940	48.2	57.0	67.5	73.8	81.2	88.2	86.6	87.6	80.8	74.9	61.4	60.2	72.2
1941	59.4	57.0	59.2	72.4	76.9	81.8	85.6	87.0	84.4	79.4	63.6	58.4	72.1
1942	55.2	58.4	65.4	72.8	77.4	84.8	83.0	83.8	78.3	70.8	67.5	61.4	71.8
1943	56.1	64.0	65.3	76.0	80.4	82.6	85.6	87.0	79.1	70.8	62.0	54.2	71.9
1944	54.2	62.6	65.2	72.5	75.6	83.2	87.0	85.4	79.7	71.6	63.2	54.2	71.2
1945	57.0	62.2	72.0	72.4	78.0	85.1	85.8	84.8	81.4	72.1	71.0	55.8	73.2
1946	54.0	60.4	68.2	75.2	80.4	80.8	86.2	85.5	82.4	76.2	65.4	-	-
1947	-	54.6	62.3	73.2	78.0	84.0	-	-	-	-	-	58.4	-
1948	51.7	59.4	64.1	74.0	80.1	85.0	86.5	86.5	79.1	72.4	63.2	63.1	72.2
1949	53.9	62.0	67.0	79.2	79.6	84.4	85.2	84.3	83.6	74.1	65.7	62.6	72.8
1950	67.2	63.8	65.7	72.7	81.0	82.0	85.7	85.4	83.7	77.4	65.2	58.5	74.1
1951	56.7	59.9	67.8	70.3	77.1	82.5	87.3	87.6	82.0	75.2	62.1	61.4	73.1
1952	64.0	62.3	66.9	73.9	76.0	81.0	88.3	88.9	80.5	69.2	62.8	56.7	72.1
1953	60.4	60.0	73.9	76.0	81.0	88.3	88.9	87.3	79.3	72.3	61.7	60.9	73.2
1954	59.0	64.7	64.9	74.1	75.9	83.7	86.1	87.1	83.1	75.4	62.9	60.9	-
1955	56.9	60.3	68.6	76.9	82.0	84.0	86.0	87.1	81.0	70.8	63.0	57.6	72.9
1956	56.8	61.8	65.0	71.7	78.3	85.8	86.2	86.6	82.5	76.9	61.6	59.4	72.5
1957	58.8	67.1	65.9	77.9	77.9	81.8	86.2	86.7	80.2	71.2	61.6	59.5	72.4
1958	52.8	54.8	59.9	71.7	77.6	84.5	86.1	87.1	81.3	71.5	64.0	51.6	70.3
1959	-	-	-	-	-	-	-	-	-	-	-	-	-
1960	55.4	54.7	59.4	74.7	78.5	85.7	86.0	84.6	78.0	74.4	67.0	53.7	71.2
1961	49.9	59.9	67.7	71.3	78.8	82.4	83.6	83.5	80.9	73.7	64.1	59.3	71.2
1962	51.4	69.3	63.6	74.0	80.5	82.8	87.4	88.3	83.6	79.4	55.7	56.2	73.5
1963	51.0	57.1	66.4	80.4	80.7	85.9	85.9	87.7	83.6	75.8	70.3	50.3	73.1
1964	59.9	56.2	66.4	76.0	82.0	85.8	87.1	86.9	82.7	71.3	69.2	56.8	72.7
1965	59.9	55.7	60.4	75.0	78.3	82.2	85.1	83.5	82.4	70.5	60.0	57.1	71.9
1966	49.4	59.1	63.8	73.4	76.0	79.5	83.5	-	82.1	72.5	67.1	58.0	-
1967	56.0	57.8	70.3	79.5	80.1	84.2	85.7	82.7	82.7	77.2	70.9	65.8	72.3
1968	52.3	53.9	60.8	73.1	77.7	82.0	82.7	84.0	79.8	75.4	64.5	58.4	70.4
1969	59.3	60.5	59.0	72.5	76.4	84.5	87.5	86.1	81.4	73.5	62.9	60.5	72.0

STATION HISTORY

Rainfall and temperature records began at Alice in December 1892. Records were sporadic from 1892 to 1903, and no records were kept 1904 to 1910. Records began again in April 1911. In June 1921, the station was moved to a site 5 blocks northwest of the post office. The city station was closed June 30, 1945 to eliminate duplication of the airway station established at Municipal Airport. The station was reestablished January 22, 1947 in lieu of airway station, and closed again November 24, 1947 when airway station was reestablished. On September 3, 1952 the city station was again reestablished, this time at the City Water Plant, 1/2 mile east-southeast of the Alice Post Office, and 2 1/2 miles west-northwest of the CAA airport site. August 13, 1953, the station was moved to the Humble Pipe Line Office, 1 1/2 miles northwest of the Alice Post Office. On June 15, 1964, the station was relocated to a site at the Texas State Highway Department, 1.8 miles southeast of the Alice Post Office building. Beginning with September 1953, daily maximum and minimum temperature and precipitation data are published in CLIMATOLOGICAL DATA-TEXAS; station index number, 41-0144-09. In this climatological summary, when necessary to complete the record, CAA airport data were substituted for the missing city office data.

ESSA State Climatologist for Texas
 Airport Administration Building
 3600 Manor Road, Austin, Texas 78712
 April 1970

Single copies of this summary are available without charge from the Bureau of Business Research, The University of Texas, Austin, Texas 78712. Quantity rates upon request.

ALICE, TEXAS

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1932	5.34	1.40	0.88	1.16	1.00	0.40	0.89	4.18	6.85	1.96	0.72	1.09	25.87
1933	0.91	2.29	1.19	1.46	1.28	1.56	6.18	4.60	1.60	1.96	0.82	0.06	26.91
1934	3.74	0.48	1.53	1.95	1.32	0.50	4.87	1.34	2.55	0.25	2.60	0.51	21.54
1935	1.11	1.07	4.74	0.67	1.20	11.26	0.84	0.10	13.68	0.36	1.26	3.70	43.33
1936	0.55	0.31	2.82	3.59	8.13	0.64	2.12	1.93	4.83	1.12	0.36	1.18	27.68
1937	0.66	0.59	1.26	0.06	2.19	1.58	1.83	0.34	0.51	0.51	0.78	3.39	15.79
1938	0.85	1.67	0.31	0.65	3.10	2.13	0	4.55	1.29	0.74	1.79	4.54	22.62
1939	1.20	0.91	0.29	0.43	1.96	6.21	1.20	1.62	5.01	1.19	0.90	1.01	21.53
1940	0.44	0.38	1.91	0.15	2.09	2.86	0.95	1.74	1.97	1.11	1.67	2.11	20.38
1941	1.06	3.11	1.93	6.15	10.33	6.36	2.75	1.33	3.63	2.29	0.90	3.27	43.11
1942	0.94	3.78	1.08	2.30	1.99	3.34	14.41	8.50	3.61	0	0.53	41.85	46.09
1943	2.70	0.30	2.28	0.31	4.40	1.15	2.22	4.90	1.05	0.95	3.15	4.45	22.70
1944	1.60	0.25	2.08	0.02	4.33	1.36	0.30	4.90	3.47	1.05	2.00	1.42	26.70
1945	0.81	1.47	2.75	3.40	0.10	1.50	1.33	3.07	2.00	0.72	0.09	1.22	18.46
1946	2.95	0.78	1.32	3.48	2.29	3.79	0.45	1.52	1.32	7.38	0.32	-	-
1947	-	0	0.55	2.79	6.09	1.73	0.80	2.61	3.38	2.22	1.71	1.53	19.72
1948	0.93	1.64	1.20	1.97	2.42	0.73	3.45	1.57	3.78	0	0	1.39	27.86
1949	0.86	2.21	0.58	5.30	0.16	1.81	1.81	1.10	1.18	0.85	0.01	0.43	17.35
1950	0.95	0.52	1.18	3.58	4.28	2.25	2.25	0.31	1.10	3.86	0.89	0.01	30.73
1951	0.25	0.31	2.10	0.47	1.82	2.77	0.47	0.62	1.17	2.63	0	2.65	14.53
1952	0.24	0.35	0.12	1.05	2.10	3.62	0.26	1.03	1.13	5.41	7.67	0.95	27.57
1953	0.14	1.21	0.41	0.24	0.98	0.03	0.26	10.13	5.41	4.22	1.28	0.14	16.86
1954	0.46	T	0.36	2.48	1.23	4.79	0.21	0.71	9.82	8.22	0.91	0.21	20.62
1955	0.63	0.80	0.02	0.06	1.80	0.76	0.48	0.58	3.55	3.55	0.58	0.58	20.62
1956	0.26	0.73	0.76	3.89	3.88	1.52	1.03	0.24	0.90	1.32	0.39	0.47	15.39
1957	0.22	1.51	1.23	7.49	4.94	6.69	0.18	1.04	5.41	1.76	5.71	1.32	37.53
1958	8.88	6.91	0.99	0.49	2.11	2.04	0.78	T	12.66	8.40	0.59	1.80	45.25
1959	0.30	3.32	0.16	0.59	3.17	3.01	0.43	2.95	2.83	2.03	2.03	0.53	21.68
1960	0.74	1.11	1.19	1.37	1.31	5.63	0.99	5.23	3.48	10.30	2.06	5.08	38.49
1961	1.43	1.35	0	1.22	0.28	4.84	2.72	1.31	3.25	0.15	3.29	0.78	20.62
1962	0.24	0.09	0.70	1.19	0.12	7.58	0.06	1.29	4.28	0.22	1.97	1.54	19.28
1963	0.25	1.77	0.15	0.60	1.20	1.61	2.05	1.65	2.10	2.16	1.65	1.34	16.50
1964	0.66	1.46	0.72	0	3.26	0.57	6.21	5.53	4.39	6.47	1.71	3.11	21.01
1965	0.56	4.00	2.26	0.05	2.88	4.14	1.21	2.13	2.61	6.47	1.01	3.11	30.13
1966	3.02	1.35	0.42	4.86	9.58	6.29	1.59	0.69	4.35	1.10	0.40	0.40	33.66
1967	2.19	0.88	0.19	0.21	2.31	0.21	0.05	4.98	18.78	2.40	0.44	0.82	33.46
1968	2.20	2.20	0.99	0.75	4.38	4.62	5.36	0.05	6.03	3.01	0.13	0.13	30.04
1969	0.30	3.69	0.87	1.98	3.23	0.49	5.40	0.20	5.66	1.60	4.04	1.97	33.43

Monthly Temperatures and Precipitation

